

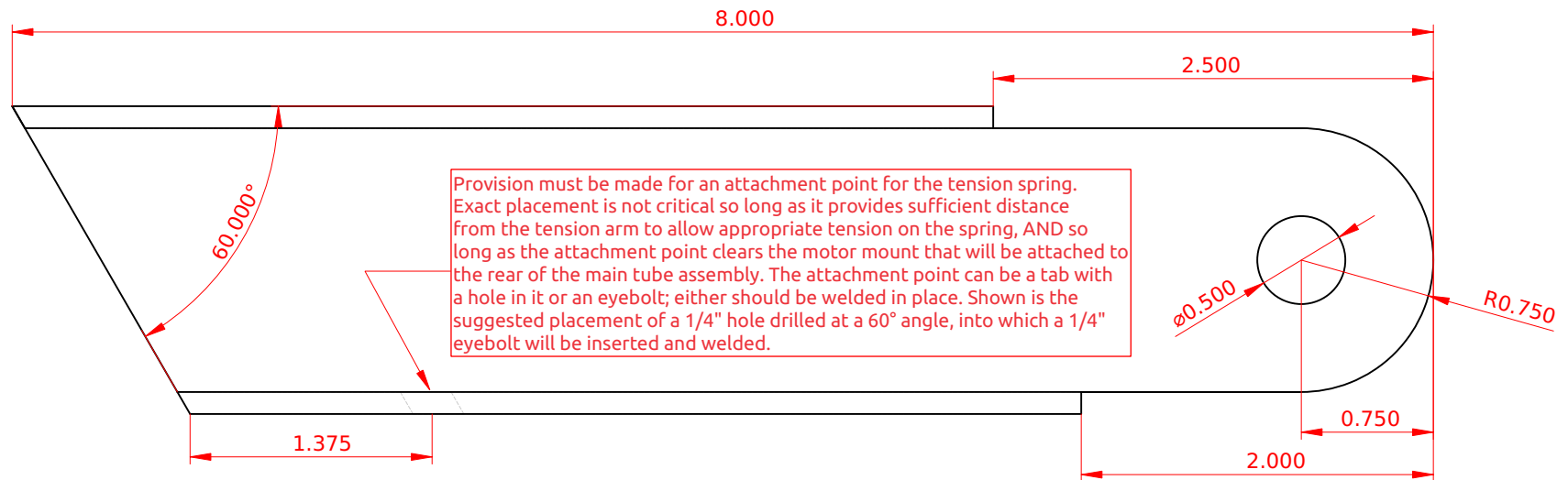
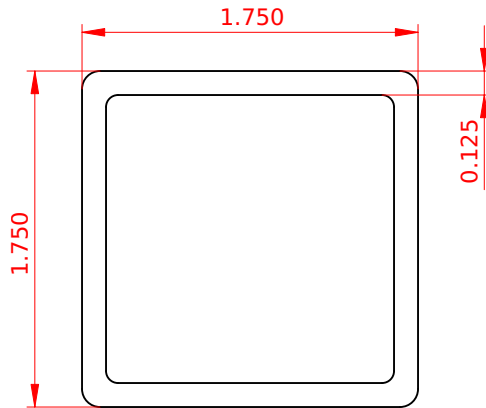
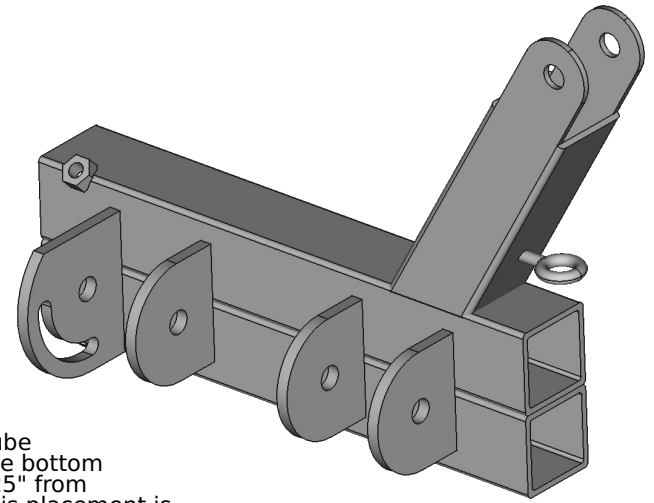
Tension Arm Support Pillar

1.75 x 1.75 x .125" mild steel tubing

Construction and Assembly:

The support pillar should be the same size tubing as the main tubes. As shown, a portion of the wall is cut away on opposite sides leaving "ears" between which the tension arm will sit and rotate. The length of this arm was set so that when the tension arm is horizontal, the tension wheel would also be roughly horizontal with the top idler wheel of the D-plate.

The tension arm support pillar is welded to the main tube assembly as shown to the right. As built and shown, the bottom edge of the tension arm support pillar is positioned 1.25" from the back edge of the main tube assembly; however, this placement is not critical - anything between 1-2" should be fine. What is critical is that the tension arm support pillar is absolutely in the same plane as the main arm assembly. To ensure this, I clamped short lengths of angle iron on each side, clamping to both the main tube assembly and the tension arm support pillar. Then I tack welded the pillar in place, removed the angle iron, and finished out the welding. This does not need a continuous weld seam; using 1/2 - 1" stitch welding will help minimize warping.



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Designed by Andrew H. Wakefield	Scale 1:1	Default Dim. +/- .005"	Title Belt Grinder	Sheet 4	Revision 1	Date 6/12/2021
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